

We claim:

1. A telecom test device for connecting to a telephone line carrying an information stream, the device comprising:
 - a measurement system connected to the device, wherein the measurement system can make a determination of a minimum period from the information stream;
 - a first circuit for determining a transmission technology from the minimum period; and
 - a second circuit for selectively connecting the device to the telephone line in response to the determination of the transmission technology.
2. The test device of claim 1 wherein first and second circuits include portions of a programmed microcontroller.
3. The test device of claim 1 further comprising:
means for externally indicating a type of information stream.
4. The test device of claim 1 wherein the measurement system includes a register for taking a digital snapshot of the information stream.
5. The test device of claim 1 wherein the second circuit selectively prevents data of only a predetermined data rate.
6. The test device of claim 3 further comprising:
an audio output device for externally indicating the transmission technology.

7. The test device of claim 3 further comprising:
a visual output device for externally indicating the transmission
technology.

8. The test device of claim 3 further comprising:
a digital output device for externally indicating the transmission
technology.

9. The test device of claim 1 further comprising:
a manual override for temporarily disabling the second circuit.

10. A software program for use by a telephone test device for
connecting to a telephone line carrying an information stream, the device
including a measurement system for making a determination of a minimum
period from the information stream, the software program comprising
instructions for:

converting the minimum period into a transmission rate measurement;
determining a transmission technology from the transmission rate
measurement;
comparing the transmission technology with a set of rules;
selectively connecting the analysis device to the telephone line according
to the rules.

11. The software program of claim 10 further comprising
instructions for:
externally indicating the transmission type.

12. A method for determining a data transmission technology on a transmission medium, the method comprising:

receiving a high-rate synchronization signal for providing a plurality of period increments, the high-rate being greater than or equal to a minimum pulse for data on the transmission medium;

counting the period increments from the high-rate synchronization signal during a pulse of data on the transmission medium;

determining the data transmission technology from the counted period increments.

13. The method of claim 12 further comprising:

counting the period increments from the high-rate synchronization signal during another pulse of data on the transmission medium; and

comparing the period increments counted from both pulses of data on the transmission medium to determine a minimum period increment.

14. The method of claim 13 wherein the two pulses occur in a single period.

15. The method of claim 13 wherein the two pulses are of the same polarity (positive or negative) in two consecutive periods.

16. The method of claim 12 further comprising:

providing an indication of the transmission technology to a telecom test set.

17. The method of claim 12 wherein the period increments are determined by a transition in the high-rate synchronization signal.

18. The method of claim 12 wherein the period increments indicate a positive transition in the high-rate synchronization signal.

19. The method of claim 12 further comprising:
counting the period increments from the high-rate synchronization signal during another pulse of data on the transmission medium; and
determining the data transmission technology from the counted period increments from both pulses.

PCT/US2014/047000